

## SOP BIO-003 FOR THE DISPOSAL OF SOLID BIOHAZARDOUS WASTE

### SCOPE

This policy describes the management and disposal of biological and medical waste, as part of the UMass Lowell Biohazardous Waste Program, with the fundamental purpose to protect staff, faculty and students that could be at risk when working with biohazardous material.

This policy is in compliance with Massachusetts Department of Public Health regulations (such as the State Sanitary Code Title VIII and 105 CMR 480.00), and Mass Department of Environmental Protection regulations 310 CMR 19.000.

### DEFINITIONS

**Biohazardous Agents** are any agents that are biological in nature, and have the capacity to produce harmful effects upon other biological organism. Biohazardous agents include, but are not limited to:

- Bacteria
- Fungi
- Viruses
- Rickettsia
- Chlamydia
- Parasites
- Recombinant products
- Allergens
- Human and non-human primate cell lines and the potentially biohazardous agents these cells may contain
- Clinical specimens
- Tissue from experimental animals
- Toxins of biological origin
- Other biohazardous agents like prions or as defined by State and Federal regulations.

**Regulated Biological/Medical Waste** is defined as any material such as sharps; blood and blood products; pathological wastes; cultures and stocks of infectious agents and associated biologicals; animal carcasses, body parts and bedding **that contains or has been contaminated with a biohazardous agent.**

**Solid Biohazardous Waste** is any material, lab plastic ware and general lab ware, **contaminated with any biohazardous agent** (*see list above*). Solid biohazardous waste includes:

- Pipette tips
- Petri dishes
- Tissue culture plates
- Flasks and tubes
- Blood vials
- Surgical wraps
- Absorbent material
- Gowns, gloves, and any other labware contaminated with biohazards.

## DISPOSAL CONTAINERS FOR BIOLOGICAL WASTE

All contaminated lab ware (see above), must be disposed of in cardboard boxes lined with Red Biohazard plastic bags that can be decontaminated by autoclaving or by incineration.

**IMPORTANT: Never over fill card boxes. They only should be filled until  $\frac{3}{4}$  of the total volume.**



## USE OF THE AUTOCLAVE TO DECONTAMINATE AND DISPOSE OF SOLID WASTE

At UMass Lowell, only those autoclaves in laboratories that comply with the specifications of the 105 CMR 480.000 may be used to decontaminate biological or medical waste according to Bio-006 SOP. For any questions about autoclaving biological waste, contact EEM-EHS at [biosafety@uml.edu](mailto:biosafety@uml.edu) or Ext. 4-2618.

## DISPOSAL OF THE AUTOCLAVED WASTE

1. Wait until the **Red Biohazard Plastic Bag** has cooled completely;
2. Transfer the cold red autoclaved bag to a regular **Black Plastic Bag**;
3. Close tightly and dispose of the black bag in the regular trash;
4. **Never** dispose of the autoclaved red bag directly in the regular trash.



### **AUTOCLAVE RECORDS**

In compliance with the 105 CMR 480.000, when biological/or medical waste is decontaminated by autoclaving it, specific records should be kept in a log.

<b>Date</b>	<b>Time</b>	<b>User Name</b>	<b>Location of Waste Generation</b>	<b>Amount of Waste</b>	<b>Cycle Used</b>	<b>Dates of Bio-Test Runs</b>

EEM-EHS coordinates and performs the bio-test to validate the equipment.

### **INCINERATION OF SOLID WASTE - USE OF THE BURNING BOX**

The incineration box or burning box has different shapes and sizes, but should always be lined with a red biohazard plastic bag. These boxes can be used when a certified autoclave is not available for decontamination of any biological waste.

EEM-EHS recommends that the following materials should not be autoclaved but disposed in the burning box:

- Personal protective equipment (gowns, gloves) soaked with large amount of human blood, body fluids or any infectious agents;
- Absorbent material (pads) and surgical wraps contaminated with infectious agents;
- Human blood vials;
- Human bodily fluid vials
- Small animal parts



## DISPOSAL OF ANIMAL AND HUMAN PARTS

All animal and human parts should be disposed directly in a plastic pail or any sturdy container, with a lid that fits tightly when closed and is marked with the Biohazard sign. Refer SOP Bio-013 for more information



For pick up of full containers, and to request new supplies, contact EEM-EHS at [biosafety@uml.edu](mailto:biosafety@uml.edu) or Ext. 4-2618.